

**Mesker Door, Inc.
3440 Stanwood Blvd.
Huntsville, AL 35811**

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed and accepted by Miami-Dade County PERA -Product Control Section to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Section (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. PERA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Section that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: Series "N (16 ga) & NVS (18 ga)" Outswing Steel Doors-L.M.I.

APPROVAL DOCUMENT: Drawing No. S-4107, titled "Commercial Steel Doors", sheets 1 through 13 of 13, prepared by manufacturer, dated 07/14/11 and last revised on 10/17/11, signed and sealed by Ryan J. King, P.E., bearing the Miami-Dade County Product Control Approval stamp with the Notice of Acceptance number and approval date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

Limitation:

1. "NVS" series is limited to Single Door application only.
2. "N" series can be single or double doors. See sheet 1 for applicable Design Pressue (DP) table.

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state and series and following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA consists of this page 1 and evidence pages E-1, as well as approval document mentioned above. The submitted documentation was reviewed by **Ishaq I. Chanda, P.E.**

4
10/20/11

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Manufacturer's die drawings and sections.
2. Drawing No. **S-4107**, titled "Commercial Steel Doors", sheets 1 through 13 of 13, prepared by manufacturer, dated 07/14/11 & last revised on 10/17/11, signed and sealed by Ryan J. King, P.E.

B. TESTS

1. Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94

along with marked-up drawings and installation diagram of outswing steel doors, prepared by Testing Evaluation Laboratory, Inc., Test Report No. **TEL-01280069A**, **TEL-012800301** both dated 10/27/10, signed and sealed by Lyndon F. Schmidt, P. E.

Note: This test report has been revised on 09/22/11 by an addendum letter, signed & sealed by Lyndon F. Schmidt, P. E.

2. Additional Test reports **TEL-01280069** dated 10/27/10 for N-series Louvered Doors per TAS 201, 202 and 203-94, signed and sealed by Lyndon F. Schmidt, P. E.

C. CALCULATIONS

1. Anchor verification calculations and structural analysis, complying with FBC, dated 11/29/10, prepared, signed and sealed by Ryan J. King, P.E.

D. QUALITY ASSURANCE

1. Miami Dade Department of Permitting, Environment, and Regulatory Affairs (PERA).

E. MATERIAL CERTIFICATIONS

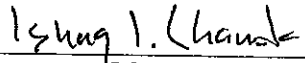
1. Tensile Test reports No. **TEL0128009-T** (N-series) and **TEL01280301-T** (NVS-series) per ASTM E-8, dated 05-09-11, signed and sealed by Lyndon F. Schmidt, P. E.
2. Notice of Acceptance No. **07-1016.07** issued to Insulfoam, LLC for their "**Expanded Polystyrene Block**", expiring on 11/29/12.

F. STATEMENTS

1. Statement letter of conformance to FBC 2007 & 2010, dated 10/17/11, signed and sealed by Ryan J. King, P.E.
2. Statement letter of no financial interest, prepared by RW consultant, dated 11/29/10, signed and sealed by Ryan J. King, P.E.
3. Statement of Lab compliance, as part of above test reports.

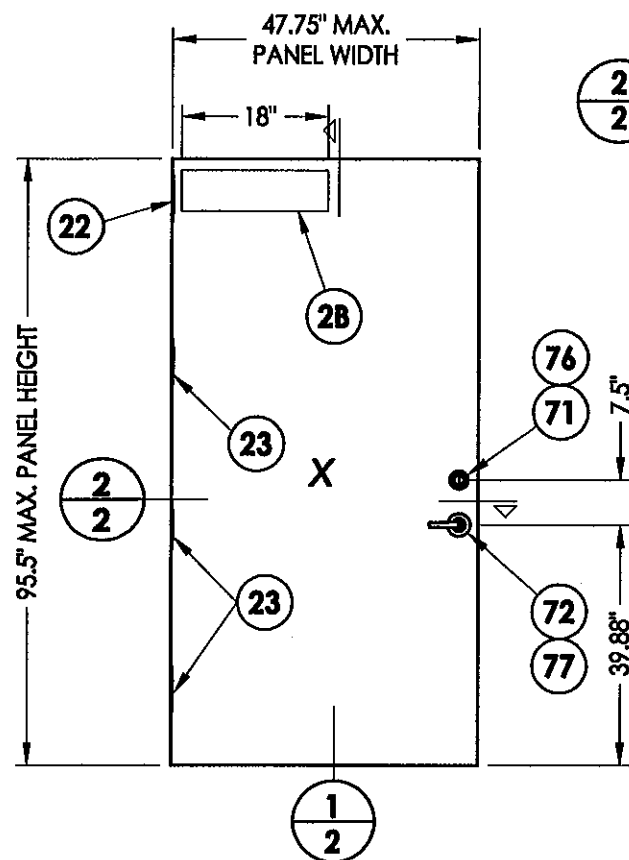
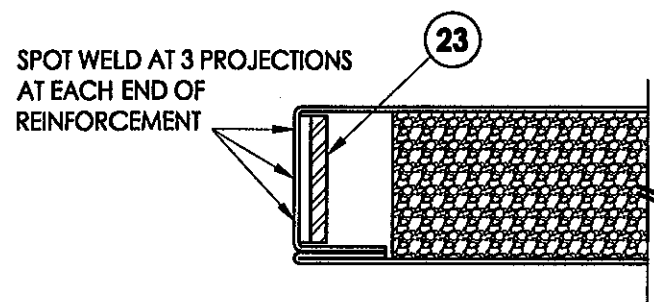
G. OTHER

1. None

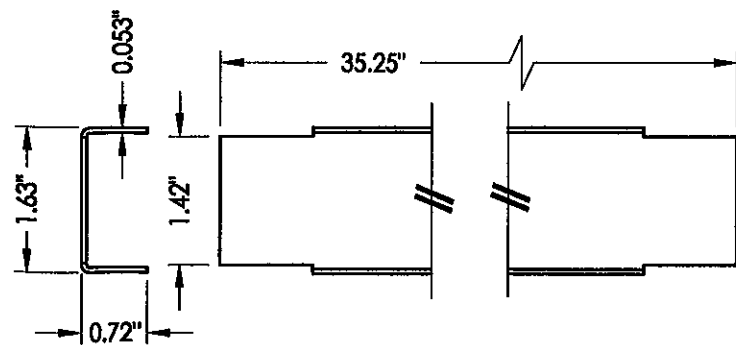


Ishaq I. Chanda, P.E.
Product Control Examiner
NOA No 10-1202.10
Expiration Date: October 27, 2016
Approval Date: October 27, 2011





7 "N" SERIES STEEL DOOR PANEL
Door skin: 16 Gauge steel (ASTM A1008 G-46.9)
(Fy min = 46.9 ksi)



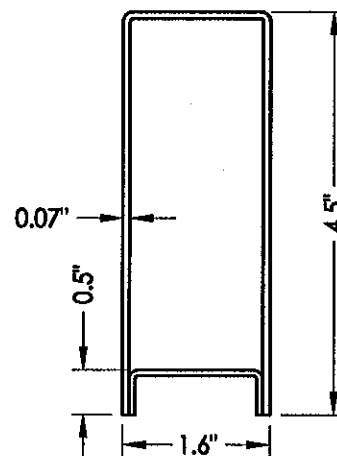
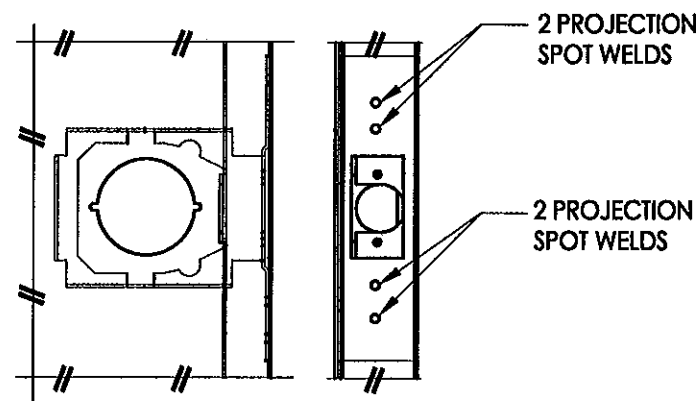
INTERIOR

EXTERIOR

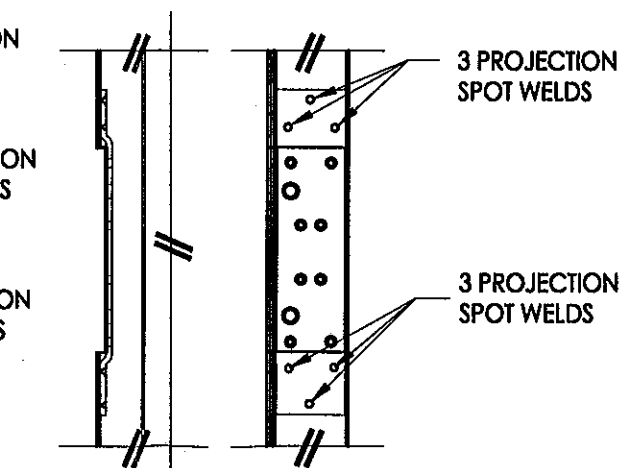
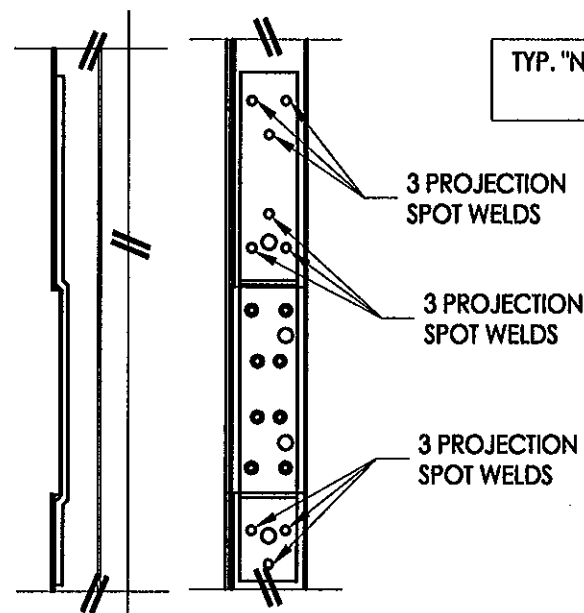
POLYSTYRENE (EPS) CORE
(BY INSULFOAM LLC)
0.92 PCF MIN. DENSITY (TYP.)

DOOR SKIN (BY MESKER)
16GA (0.060" THK. STEEL)
(Fy min. = 46.9 ksi)

SPOT WELD AT 2 PROJECTIONS
AT EACH END OF
REINFORCEMENT



TYP. "N" SERIES (16 ga.) SINGLE OR DOUBLE
DOOR CONSTRUCTION



SPOT WELD AT 2" O.C.
ALONG ENTIRE LENGTH
OF DOOR TOP CLOSER

SPOT WELD AT EACH
CORNER OF CLOSER
REINFORCEMENT

EXTERIOR

INTERIOR

SPOT WELD AT 2" O.C.
ALONG ENTIRE LENGTH
OF CLOSER REINFORCEMENT

DOOR SKIN (BY MESKER)
16GA (0.060" THK. STEEL)
(Fy min. = 46.9 ksi)

POLYSTYRENE (EPS) CORE
(BY INSULFOAM LLC)
0.92 PCF MIN. DENSITY (TYP.)

SPOT WELD AT 2" O.C.
ALONG ENTIRE LENGTH
OF DOOR BOTTOM CLOSER

1
2 **VERTICAL CROSS SECTION**
Door panel
16 ga. steel

Approved as complying with the
Florida Building Code
Date: 02-27-2011
NOA# 10-1202-10
Miami State Product Control
By: [Signature]

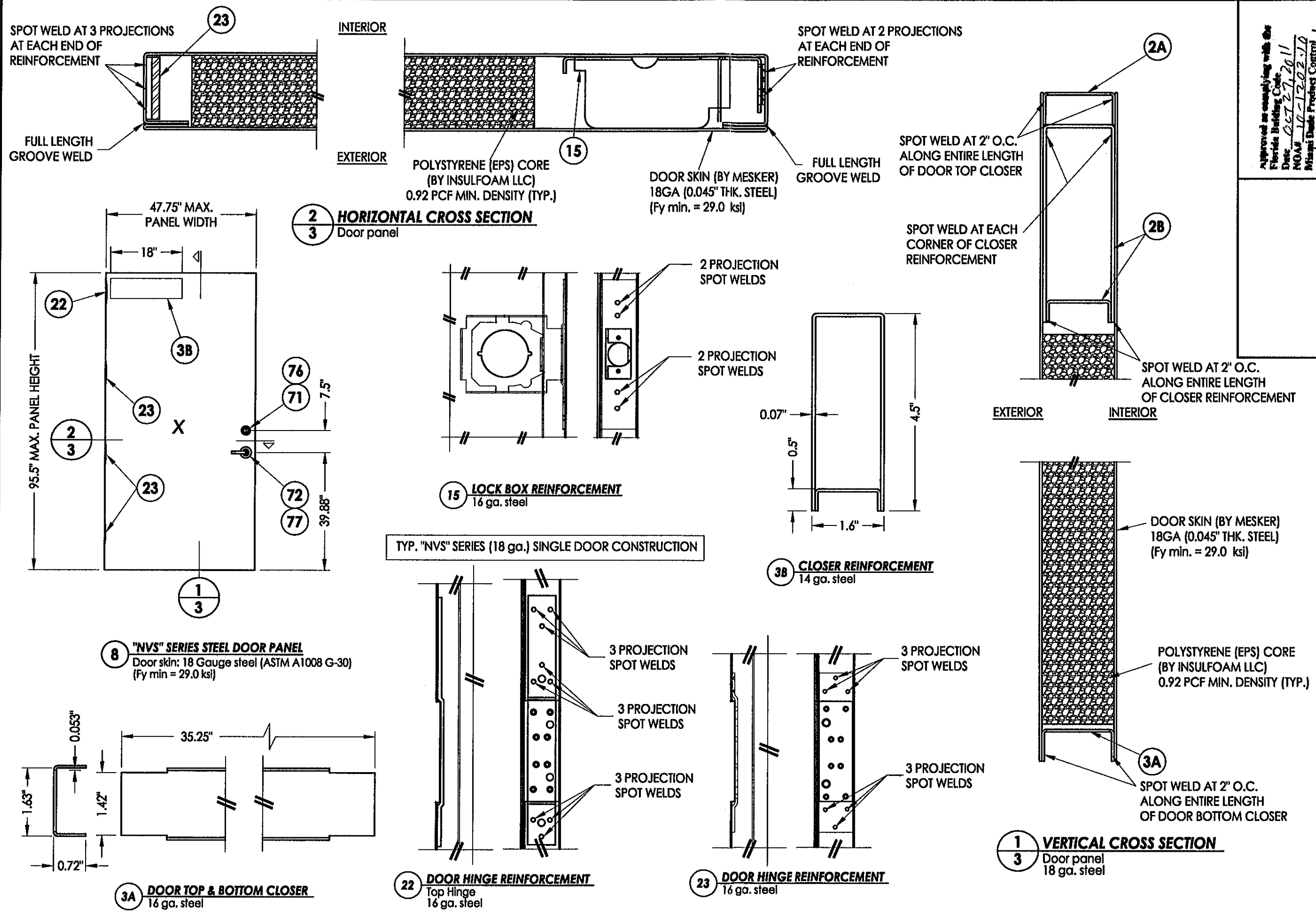
PRODUCT: MESKER
COMMERCIAL STEEL DOOR
PART OR ASSEMBLY:
DOOR PANEL DETAILS
(N" SERIES)

NO.	DATE	BY	REVISIONS

DATE: 7/14/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: S-4107
SHEET 2 OF 13

10-17-11
Ryan J. King, P.E., No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558

R:\A - Projects\Project Folders\proj 1501 - 1600\PF 1570\DWG. RWBC Drawings\S-4107.dwg, 3



SEE TYP. "N" SERIES (16 ga.)
SINGLE OR DOUBLE DOOR CONSTRUCTION

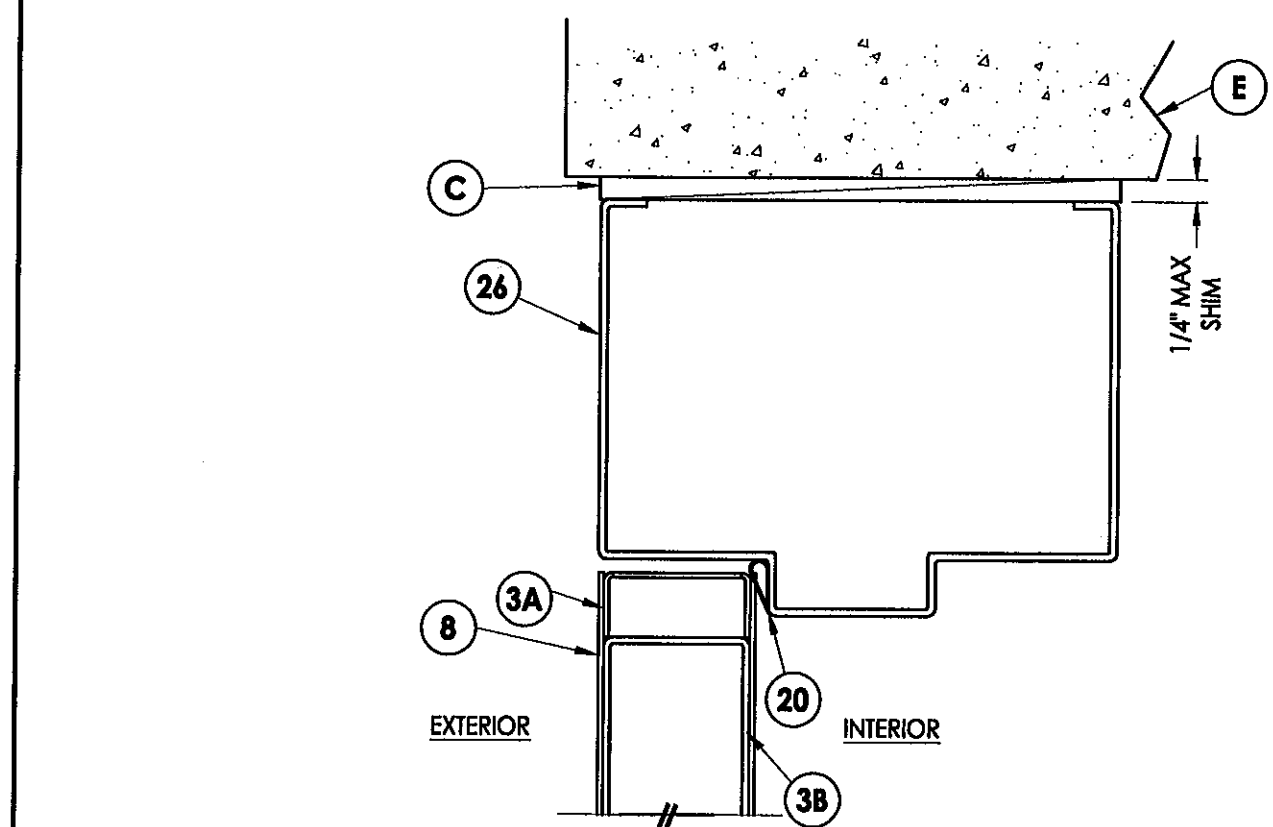


16-17-11
Ryan J. King, P.E. No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558

PRODUCT: MESKER
COMMERCIAL STEEL DOOR

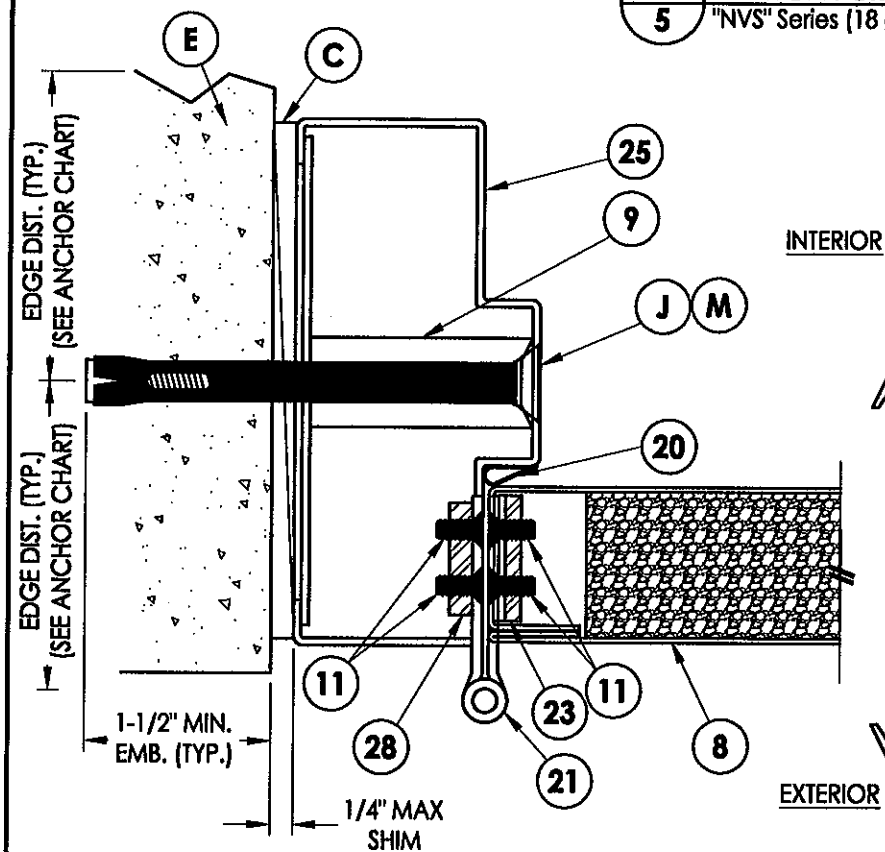
PART OR ASSEMBLY: CROSS SECTIONS
("N" SERIES DOOR)

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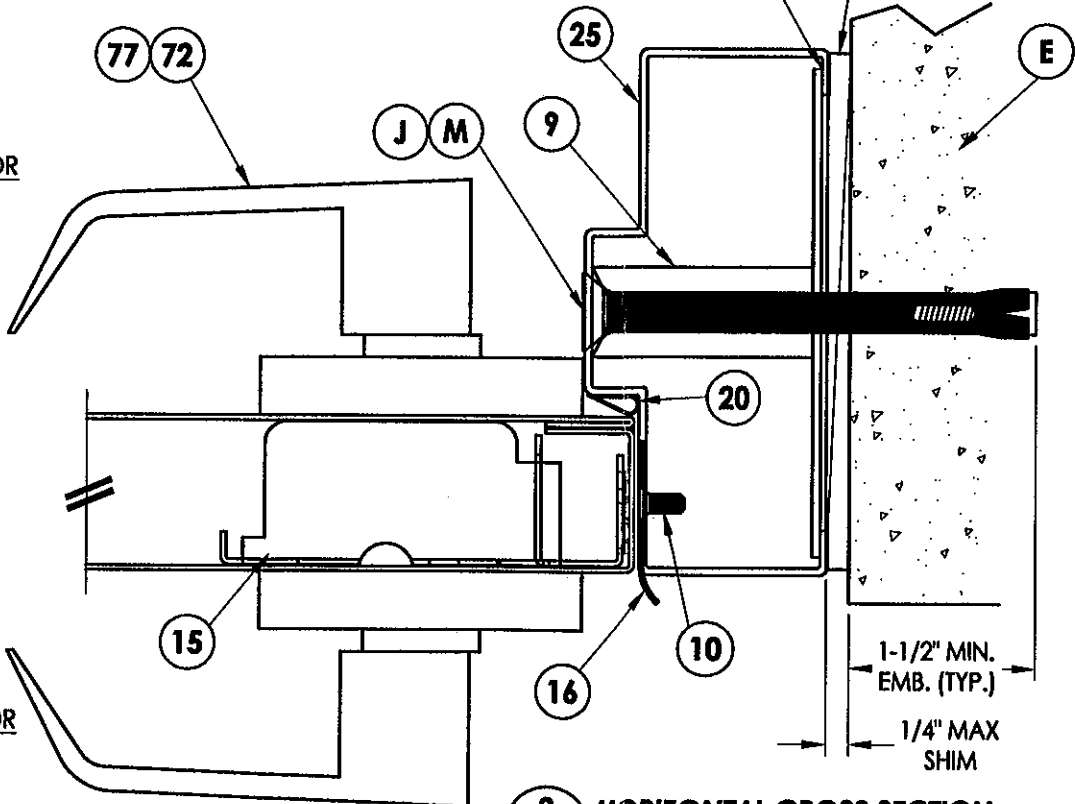


3 VERTICAL CROSS SECTION
5 "NVS" Series (18 ga.)

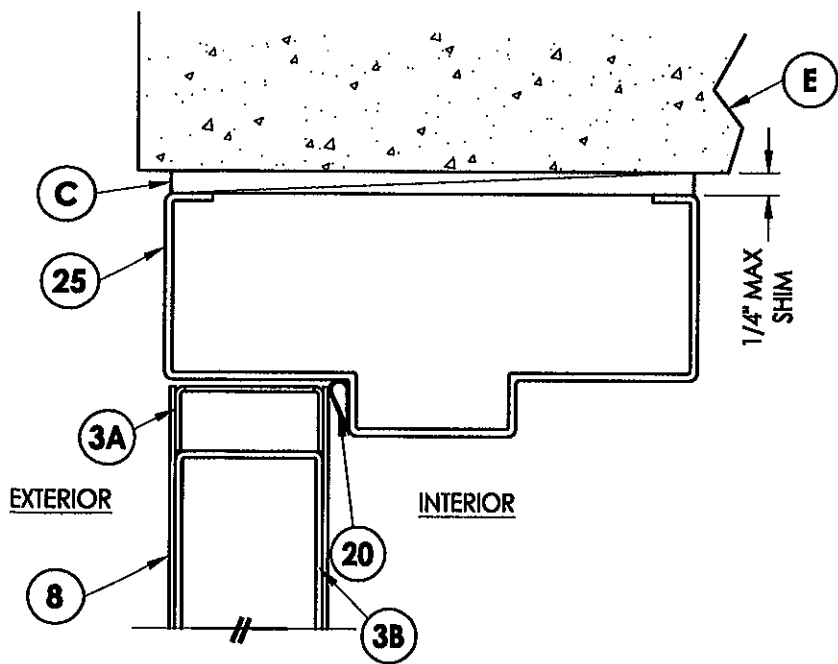
SEE TYP. "NVS" SERIES (18 ga.)
SINGLE DOOR CONSTRUCTION



1 HORIZONTAL CROSS SECTION
5 "NVS" Series (18 ga.)

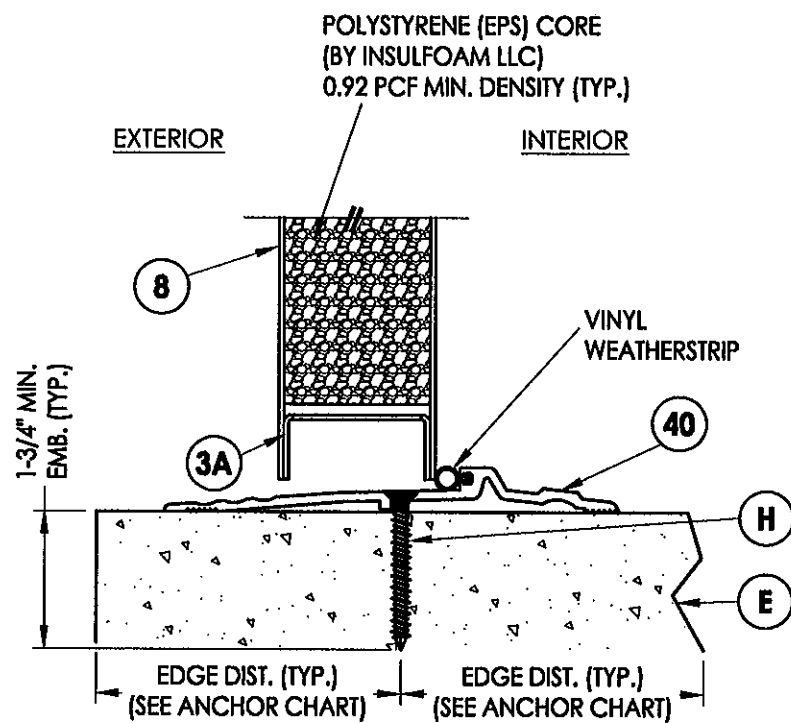


2 HORIZONTAL CROSS SECTION
5 "NVS" Series (18 ga.)



4 VERTICAL CROSS SECTION
5 "NVS" Series (18 ga.)

Tube anchor spot welded to
frame at each end.



5 VERTICAL CROSS SECTION
5 "NVS" Series (18 ga.)

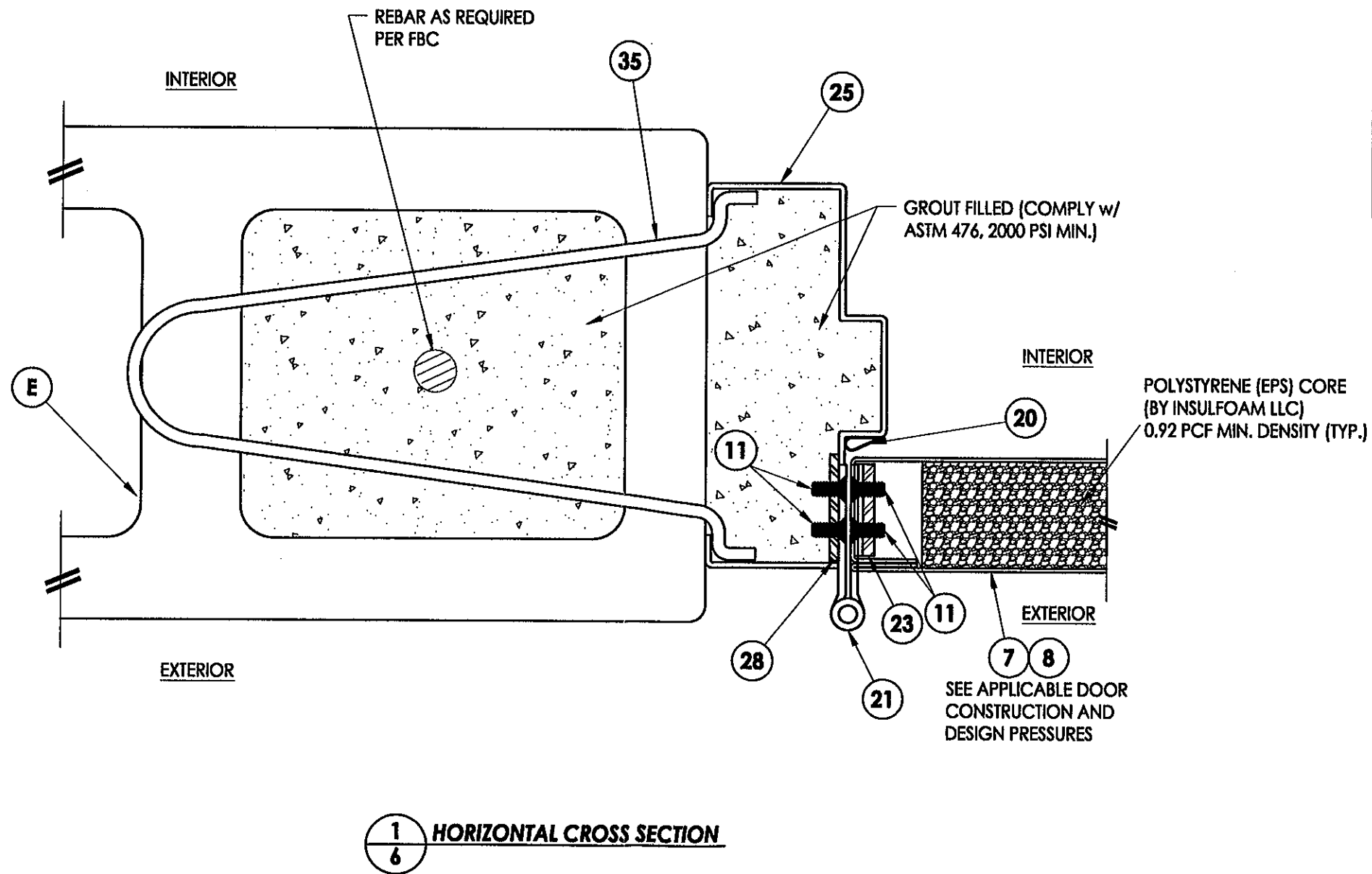
Approved as complying with the
Florida Building Code
Date: OCT 27, 2011
NO. 10-1202-10
Miami State Product Control
By: Sheryl L. Hunt

11-17-11
Ryan J. King, P.E. No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558

PRODUCT: MESKER
COMMERCIAL STEEL DOOR
PART OR ASSEMBLY:
CROSS SECTIONS
("NVS" SERIES DOOR)

NO.	DATE	BY	REVISIONS

DATE: 7/14/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: S-4107
SHEET 5 OF 13



Approved as complying with the
Florida Building Code.
Date Oct 27, 2011
NOA# 10-1702-P
Miami Dade Product Control
By Gregory J. Gryn

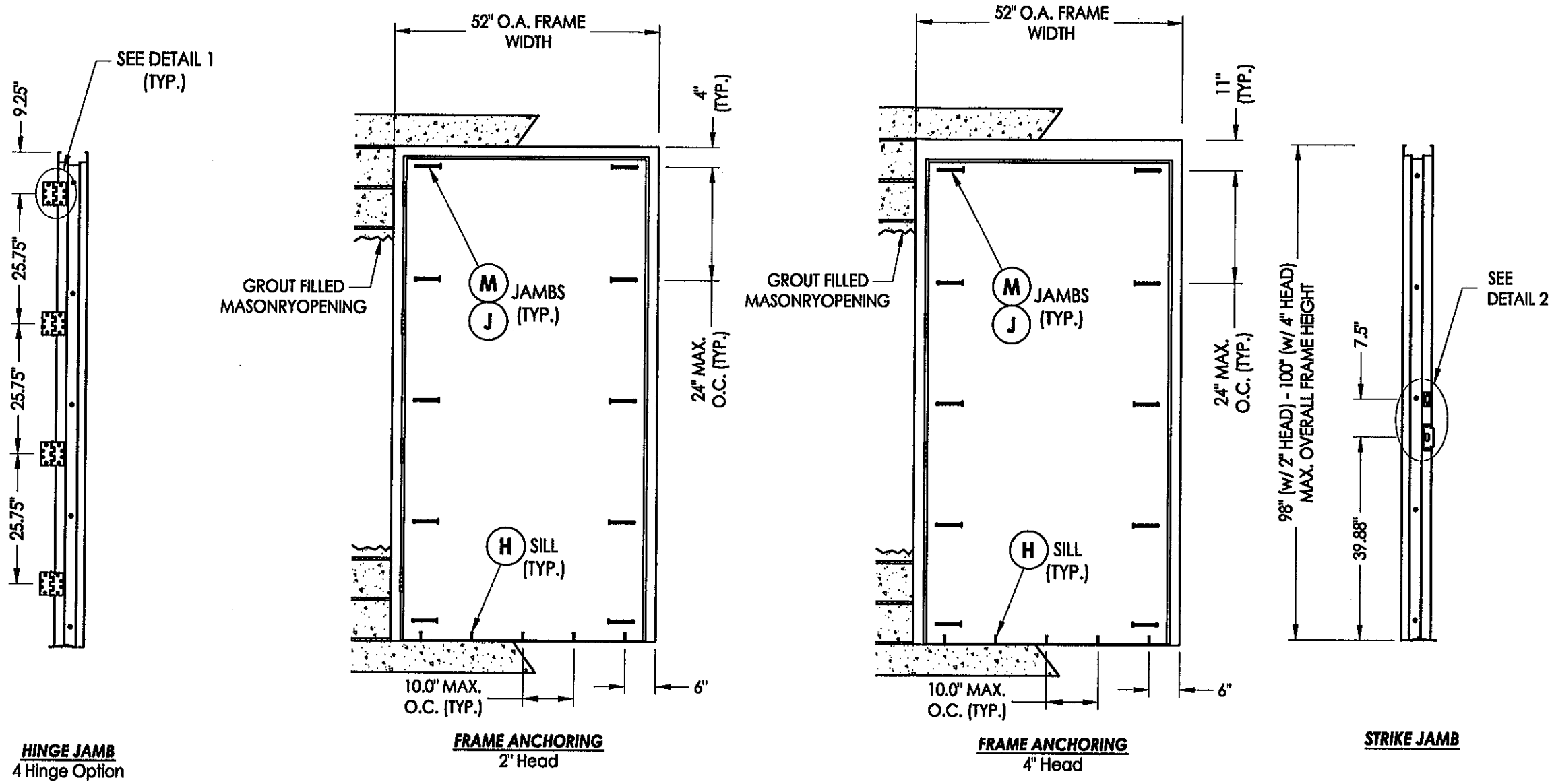
DATE:	7/14/11
SCALE:	N.T.S.
DWG. BY:	JK
CHK. BY:	LFS
DRAWING NO.:	S-4107
SHEET	6 OF 13

PRODUCT: MESKER COMMERCIAL STEEL DOOR	PART OR ASSEMBLY: HORIZONTAL CROSS SECTIONS (WIRE CONCRETE ANCHORS)
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Ryan J. King 10-17-11
Ryan J. King, P.E. No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558

© 2010.

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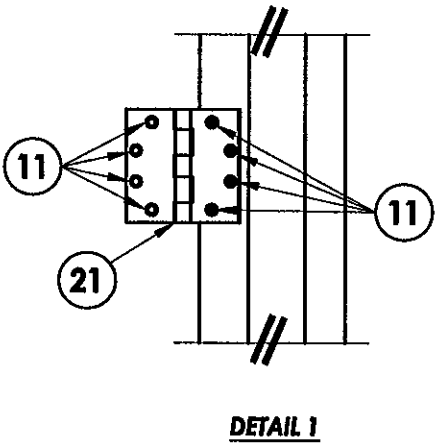
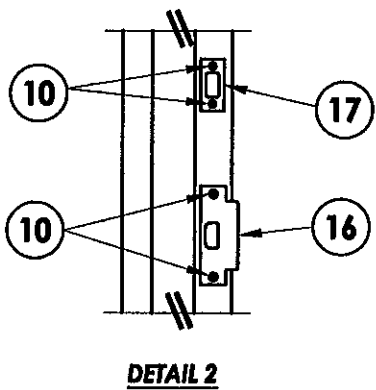


"NVS" SERIES

CONCRETE SCREW ANCHOR NOTES:

1. Concrete screw locations at the corners may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER" must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.

ANCHOR TYPE	ANCHOR SIZE	MINIMUM EMBEDMENT	MINIMUM CLEARANCE TO MASONRY EDGE	MINIMUM CLEARANCE TO ADJACENT ANCHOR
(H) ITW (sill only)	1/4"	1-3/4"	2-1/2"	3"
DYNABOLT SLEEVE (M) ANCHOR	3/8"	1-1/2"	2-1/4"	4-1/2"
(J) POWERS TAPPER	3/8"	1-1/2"	4-1/2"	6"



Approved as complying with the Florida Building Code
Date: 06-27-2011
NGAS 10-1702-10
Whitney Steel Product Control
By: [Signature]

16-17-11
[Signature]
Ryan J. King, P.E. No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558

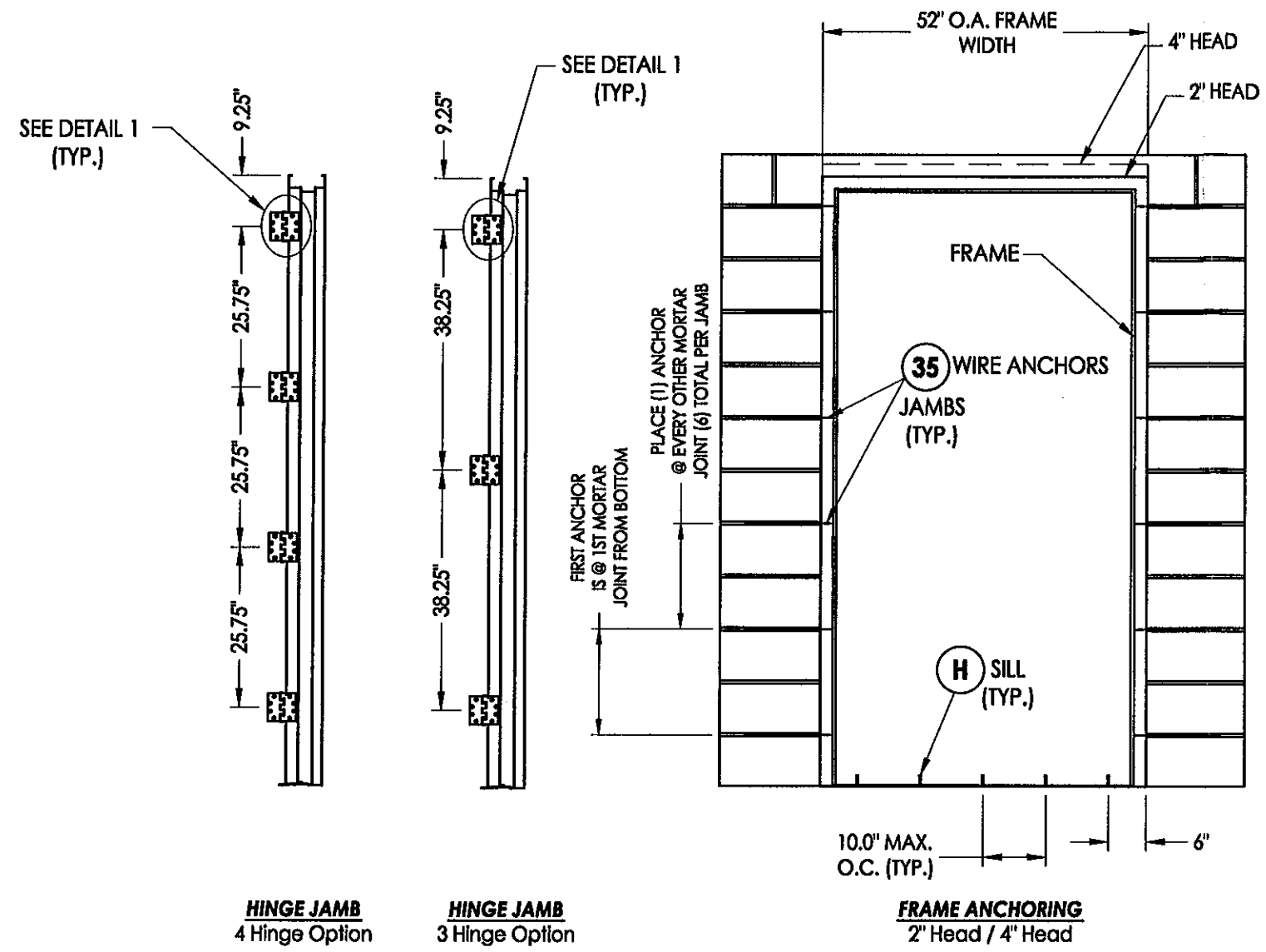
PRODUCT: MESKER COMMERCIAL STEEL DOOR

PART OR ASSEMBLY: ANCHORING DETAILS

REVISIONS	
NO.	DATE

DATE: 7/14/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: S-4107
SHEET 7 OF 13

R:\A - Projects\Project Folders\proj 1501 - 1600\PF 1570\DWG. RWBC Drawings\S-4107.dwg, 8



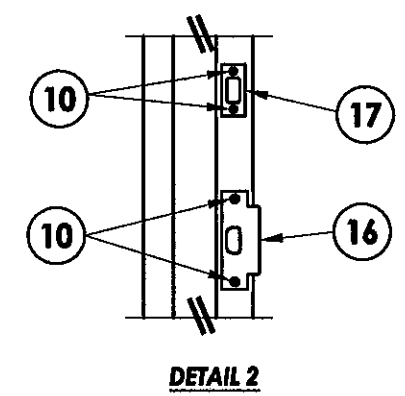
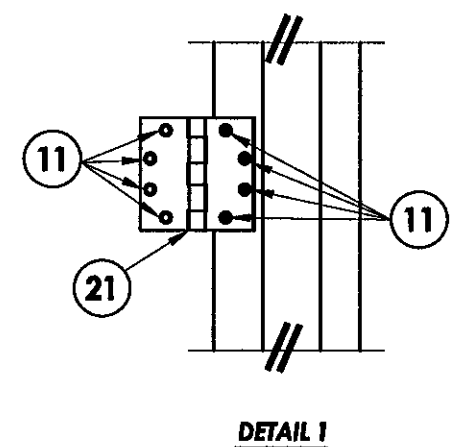
"NVS" SERIES

CONCRETE SCREW ANCHOR NOTES:

1. Concrete screw locations at the corners may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER" must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.

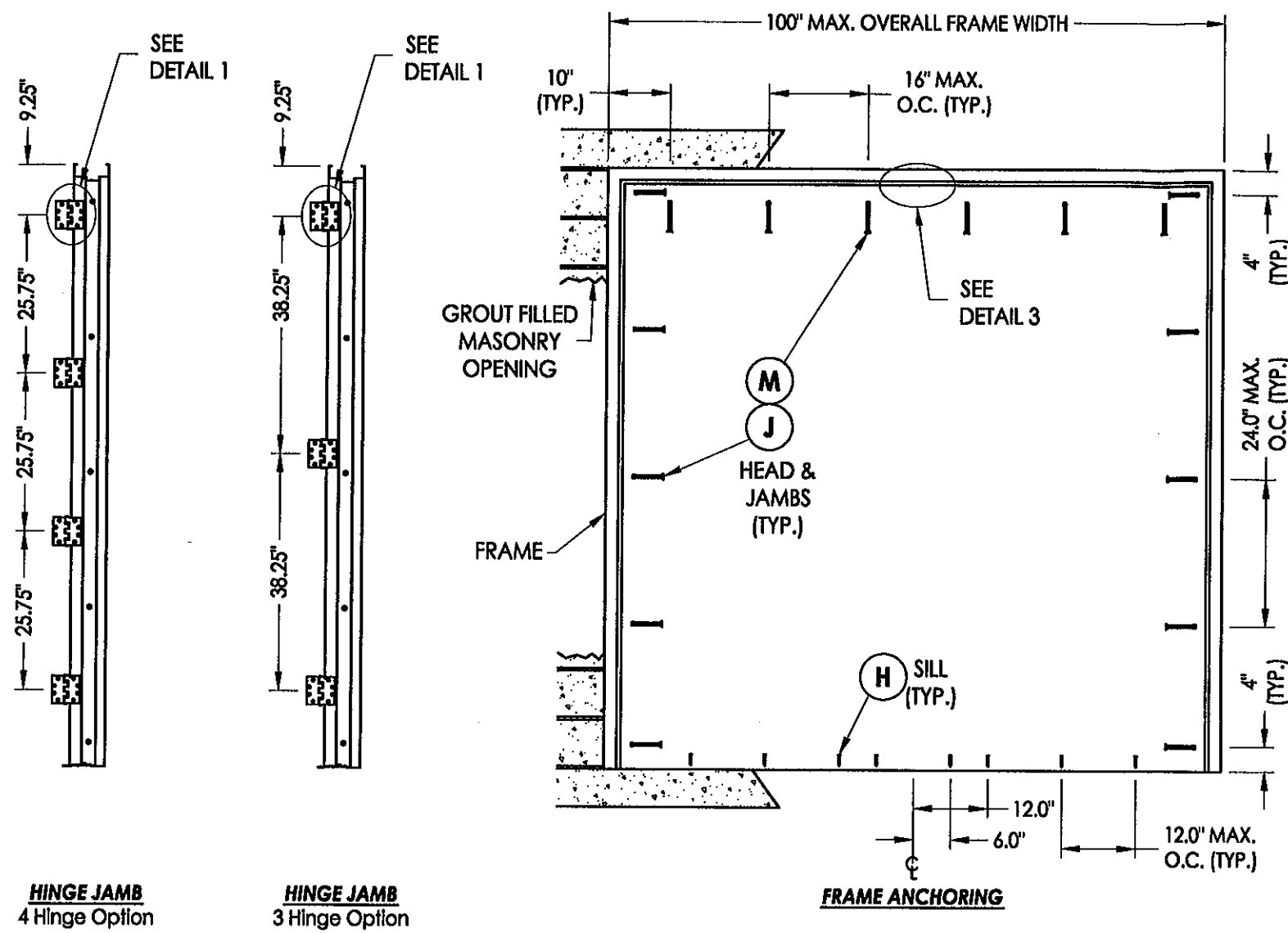
ANCHOR TYPE	ANCHOR SIZE	MINIMUM EMBEDMENT	MINIMUM CLEARANCE TO MASONRY EDGE	MINIMUM CLEARANCE TO ADJACENT ANCHOR
(H) ITW (sill only)	1/4"	1-3/4"	2-1/2"	3"
(35) Wire Anchor*	Ø = 0.19"	9-1/4"	1"	Every other mortar joint

* See detail 1, sheet 6



Approved as complying with the
Florida Building Code
Date: OCT 27 2011
R0048 10-12-2010
By: [Signature]
10-17-11

PRODUCT: MESKER COMMERCIAL STEEL DOOR		PART OR ASSEMBLY: ANCHORING DETAILS	
DATE: 7/14/11	SCALE: N.T.S.	DWG. BY: JK	CHK. BY: LFS
DRAWING NO.: S-4107		SHEET 8 OF 13	
BY: [Signature]		10-17-11	
Ryan J. King, P.E. No. 64619		4213 Fishermans Lake Dr. Lutz, FL 33558	

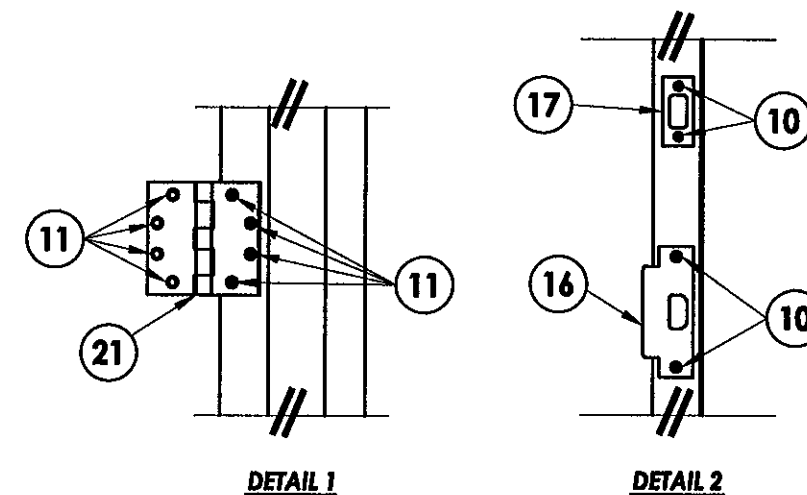
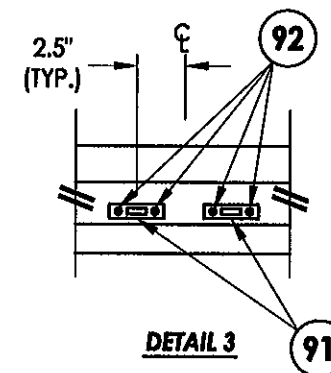
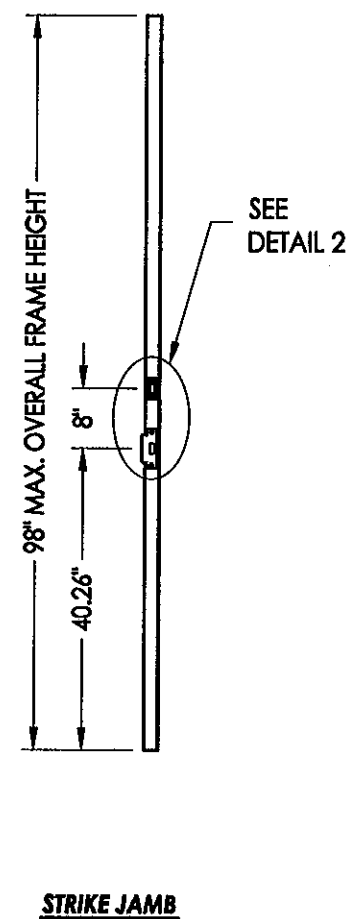


"N" SERIES

CONCRETE SCREW ANCHOR NOTES:

1. Concrete screw locations at the corners may be adjusted to maintain the minimum edge distance to mortar joints. If concrete screw locations noted as "MAX. ON CENTER" must be adjusted to maintain the minimum edge distance to mortar joints, additional concrete screws may be required to ensure the maximum on center dimension is not exceeded.

ANCHOR TYPE	ANCHOR SIZE	MINIMUM EMBEDMENT	MINIMUM CLEARANCE TO MASONRY EDGE	MINIMUM CLEARANCE TO ADJACENT ANCHOR
(H) ITW (sill only)	1/4"	1-3/4"	2-1/2"	3"
(M) DYNABOLT SLEEVE ANCHOR	3/8"	1-1/2"	2-1/4"	4-1/2"
(J) POWERS TAPPER	3/8"	1-1/2"	4-1/2"	6"



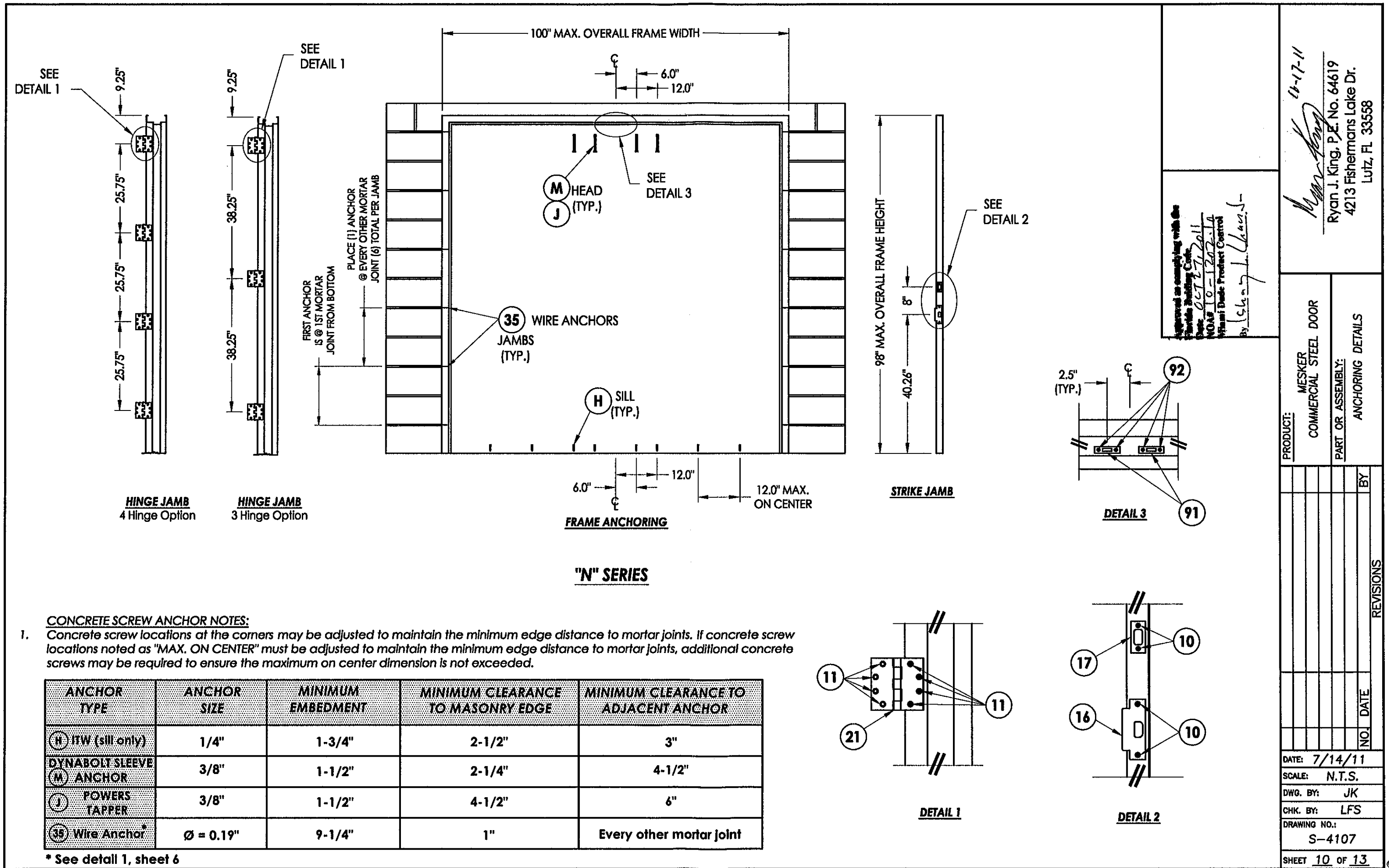
Approved as complying with the
Florida Building Code
Date Oct 22, 2011
NQA# 10-1202-10
Miami Date Product Control
by Shay L. Clark

10-17-11
[Signature]
Ryan J. King, P.E. No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558

PRODUCT: MESKER
COMMERCIAL STEEL DOOR

PART OR ASSEMBLY: ANCHORING DETAILS

[illegible]



Approved as complying with the
Florida Building Code.
Date: OCT 27 2011
NOA# 10-1202-14
Miami Dade Product Control
By: [Signature]

16-17-11
Ryan J. King
Ryan J. King, P.E. No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558

PRODUCT:	MESKER COMMERCIAL STEEL DOOR
PART OR ASSEMBLY:	ANCHORING DETAILS

[illegible]

Technical drawing of a mechanical part showing front and top views with dimensions:

- Front View (Top):**
 - Overall width: 2.84"
 - Height of the main body: 2.55" min.
 - Height of the central feature: 0.075"
 - Width of the central feature: 0.88"
- Top View (Bottom):**
 - Overall length: 5.68"
 - Width of the part: 1"
 - Central circular feature with diameter: $\varnothing 0.75"$

Technical drawing of a square flange with a gear-like center. The drawing includes the following dimensions:

- Overall width: 4.68"
- Overall height: 6.73"
- Inner square width: 3.88"
- Inner square height: 3.5"
- Flange thickness: .060"

Technical drawing of a rectangular plate. The front view shows a plate with a total width of 1.25" and a total height of 4.11". The top-left corner is rounded with a radius of R0.13". The plate is divided into three horizontal sections: a top section with a height of 0.52" containing four holes, a middle section, and a bottom section containing four holes. A cross-section view on the right shows the plate's profile with a total thickness of 0.075". The cross-section features a central rectangular cavity with a height of 1.56" and a top flange with a height of 0.97".

Technical drawing of a rectangular plate. The drawing includes a side view on the left and a top view on the right.

Side View (Left):

- Overall length: 8"
- Overall width: 4.75"
- Thickness: 0.18"

Top View (Right):

- Overall width: 4.75"
- Overall length: 8"
- Dimensions from the top edge:
 - 0.88" to the first hole centerline
 - 1.23" between the first and second hole centerlines
 - 1.13" between the second and third hole centerlines
 - 1.13" between the third and fourth hole centerlines
- Dimensions from the right edge:
 - 0.75" to the first hole centerline
 - 1" between the first and second hole centerlines
 - 1" between the second and third hole centerlines
 - 0.75" to the fourth hole centerline
- Dimensions from the bottom edge:
 - 0.7" to the first hole centerline
 - 1.4" to the second hole centerline

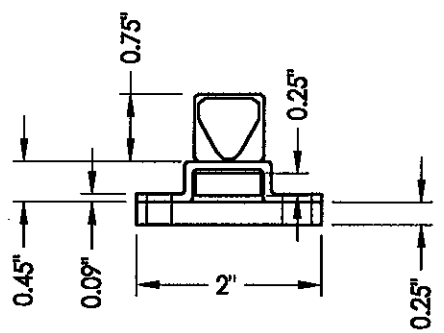
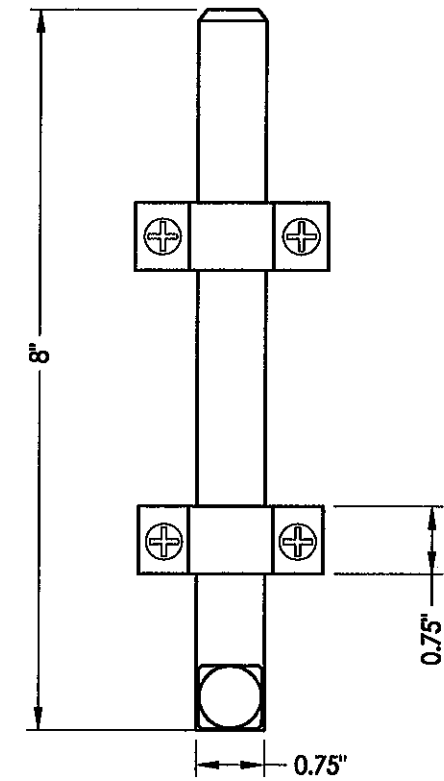
The top view shows a pattern of 12 holes arranged in two rows of six. The holes are represented by circles with a cross inside. The dimensions are given in inches.

Approved as complying with the
Florida Building Code.
Date 0CT 22, 2011
NOA# 10-1202-10
Miami Dade Product Control
By: Shayla Charles

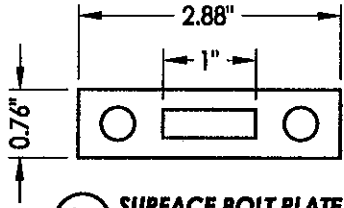
PRODUCT: MESKER
COMMERCIAL STEEL DOOR

PART OR ASSEMBLY: COMPONENTS

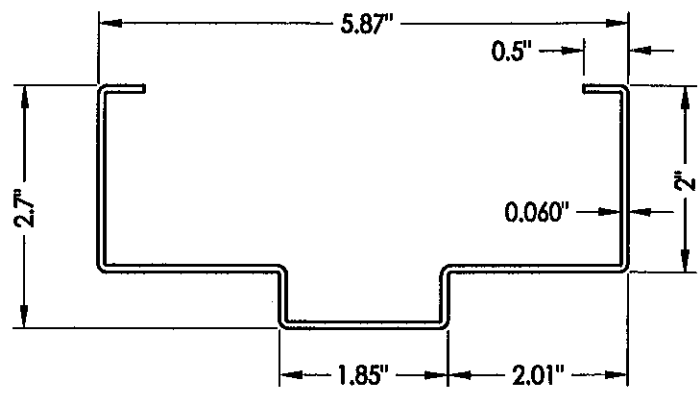
[Signature]
Ryan J. King, P.E. No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558
10-17-11



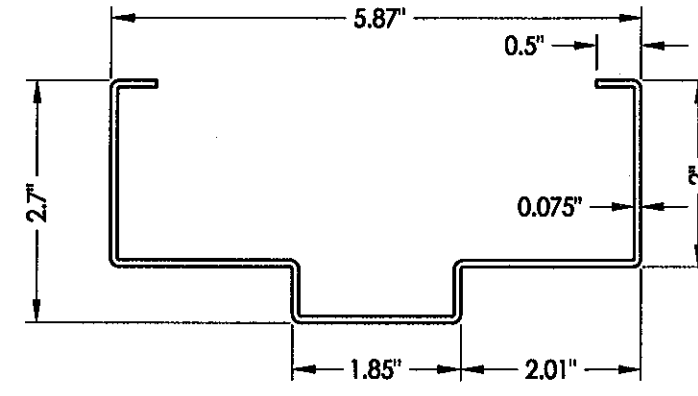
82 SURFACE BOLT
ROCKWOOD 580-8



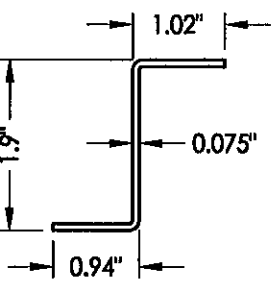
91 SURFACE BOLT PLATE
12 ga. steel



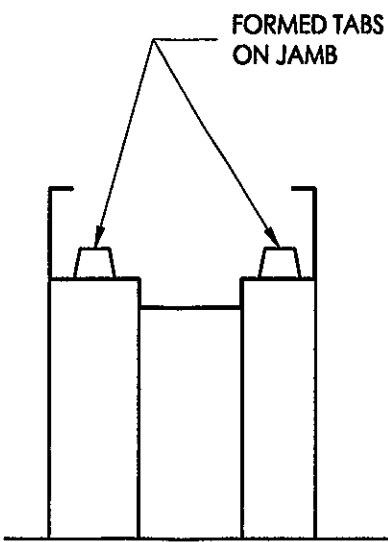
25 16 GA. HOLLOW METAL FRAME
2" Head



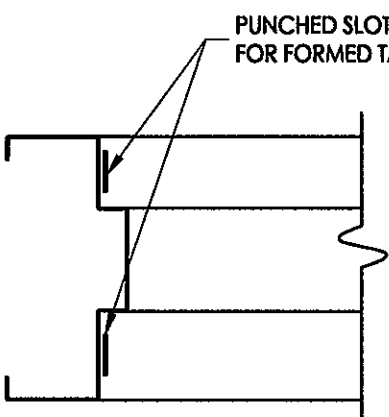
25A 14 GA. HOLLOW METAL FRAME
2" Head



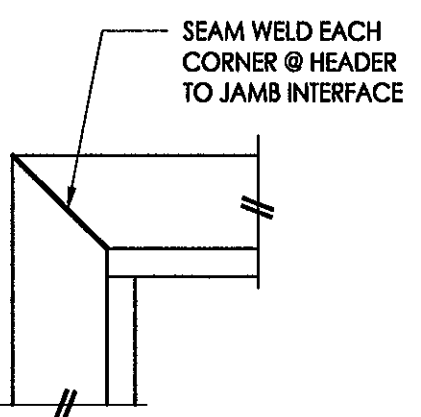
87 Z ASTRAGAL
14 ga. steel



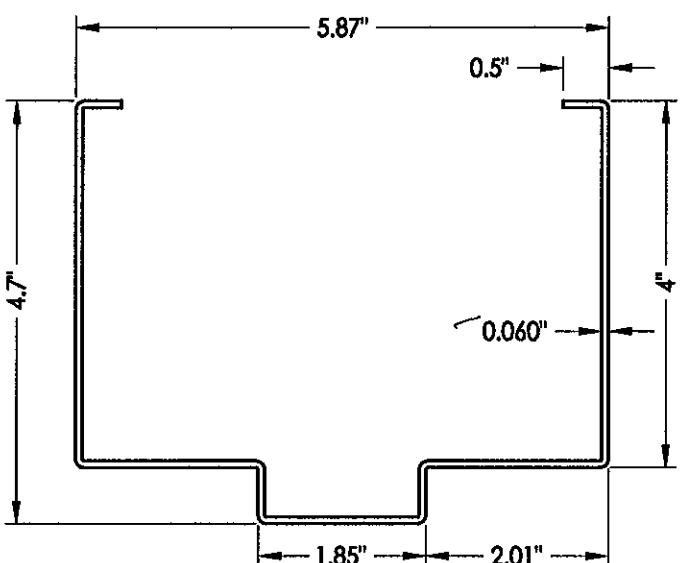
JAMB DETAIL



HEADER DETAIL



WELDED CORNER CONSTRUCTION DETAILS



26 16 GA. HOLLOW METAL FRAME
4" Head

Approved as complying with the
Florida Building Code
Date: 06-27-2011
By: 16-12-2011
Miami Code Product Control
By: 16-12-2011

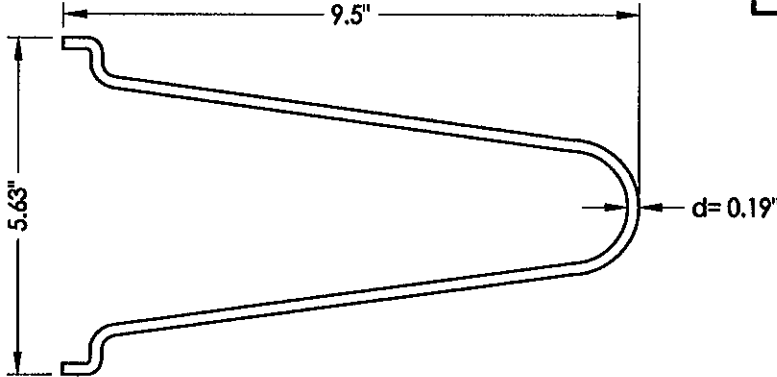
16-17-11
Ryan J. King, P.E. No. 64619
4213 Fishermans Lake Dr.
Lutz, FL 33558

PRODUCT: MESKER
COMMERCIAL STEEL DOOR
PART OR ASSEMBLY:
COMPONENTS AND
CORNER CONSTRUCTION

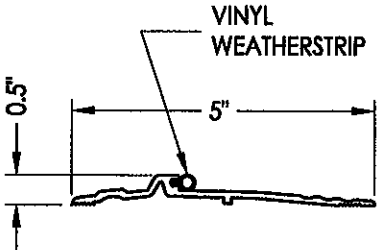
NO.	DATE	REVISIONS	BY

DATE: 7/14/11
SCALE: N.T.S.
DWG. BY: JK
CHK. BY: LFS
DRAWING NO.: S-4107
SHEET 12 OF 13

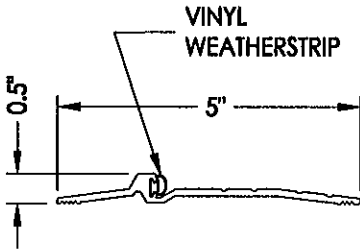
BILL OF MATERIALS		
ITEM #	DESCRIPTION	MATERIAL
C	1/4" MAX. SHIM SPACE	-
E	CONCRETE (3,192 PSI MIN.) CONFORMING TO ACI 318 OR GROUT FILLED HOLLOW BLOCK CONFORMING TO ASTM C90 & ASTM 476 (2000 PSI MIN.)	CONCRETE
H	1/4" x 2-1/4" ITW PFH CONCRETE SCREW (SILL INSTALLATION ONLY)	STEEL
J	3/8" X 5" PFH ITW DYNABOLT SLEEVE ANCHOR	STEEL
M	3/8" X 5" TAPPER CONCRETE SCREW BY POWERS FASTENERS	STEEL
7	"N" SERIES (16 ga.) STEEL DOOR PANEL (Fy min = 46.9 ksi)	ASTM A1008 G-46.9 STEEL
8	"NVS" SERIES (18 ga.) STEEL DOOR PANEL (Fy min = 29.0 ksi)	ASTM A1008 G-30 STEEL
9	TUBE ANCHOR	STEEL
10	#12-24 X 1" COMBINATION MACHINE / WOOD SCREW	STEEL
11	#12-24 x 1/2" SELF TAPPER	STEEL
15	LOCK BOX REINFORCEMENT	STEEL
16	ANSI LATCH STRIKE	STEEL
17	DEADBOLT STRIKE	STEEL
19	DEADBOLT STRIKE REINFORCEMENT	STEEL
20	WEATHERSTRIP (PEMKO S-88)	NEOPRENE
21	4-1/2" X 4-1/2" X 0.125" TEMPLATE HINGE	STEEL
22	STANDARD (LONG) DOOR HINGE TOP HINGE REINFORCEMENT	STEEL
23	STANDARD (SHORT) DOOR HINGE MIDDLE BOTTOM REINFORCEMENT	STEEL
25	FRAME - 16GA (0.06" THK) BY MESKER (2" HEAD)	STEEL
25A	FRAME - 14GA (0.075" THK) BY MESKER (2" HEAD)	STEEL
26	FRAME - 16GA (0.06" THK) BY MESKER (4" HEAD) (SINGLE DOOR INSTALLATION ONLY)	STEEL
27	LATCH STRIKE REINFORCEMENT	STEEL
28	FRAME HINGE REINFORCEMENT	STEEL
35	WIRE ANCHOR	ASTM A36 STEEL
40	THRESHOLD (NATIONAL GUARD PRODUCTS, INC. #896V) - SINGLE OR DBL. DOORS	ALUMINUM
41	THRESHOLD (PEMKO 2005_V) - SINGLE DOORS ONLY	ALUMINUM
71	DESIGN HARDWARE D1-S SERIES DEADBOLT	STEEL
72	DESIGN HARDWARE "Z" SERIES ENTRY	STEEL
76	DESIGN HARDWARE D2-S SERIES DEADBOLT	STEEL
77	DESIGN HARDWARE "X" SERIES ENTRY	STEEL
82	SURFACE BOLT (ROCKWOOD 580-8)	STEEL
83	3/8" x 1-3/4" L. SEXBOLT (SURFACE BOLT)	STEEL
87	Z ASTRAGAL (MESKER)	STEEL
91	SURFACE BOLT STRIKE PLATE	STEEL
92	#8-18 X 1-1/2" PPH SELF-DRILLING SMS	STEEL



35 MASONRY WIRE ANCHOR
ASTM A36 Steel
Fy = 36 ksi, Ft = 22 ksi, Fv = 14.5 ksi



40 THRESHOLD
NGP #896V
(Single or double door)



41 THRESHOLD
PEMKO 2005_V
(Single door only)

Approved as complying with the
Florida Building Code
Date: OCTOBER 27, 2011
NOAR 10-12-10-10
Miami Dade Product Control
By: [Signature]

10-17-11
[Signature]
Ryan J. King, P.E. No. 64619
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